BARRIE D. COATE and ASSOCIATES
Horticutural Consultants
23535 Summit Road
Los Gatos, CA 95033
408/353-1052

ATTACHMENT E
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EVALUATION OF TREES AT THE SOUTHBAY CHRISTIAN CENTER 539 E. WEDDELL DRIVE SUNNYVALE

Prepared at the request of:
Brian Pendley
Pendley & Associates
9008 Siegal Street
Valley Springs, CA 95252

Prepared by:
Michael L. Bench
Consulting Arborist
August 4th, 2005

Job # 08-05-157 Site II

Assignment
I was asked by Mr. Jonathon Stone to evaluate the trees located at 539 E. Weddell Drive, Sunnyvale, California, and to prepare a Tree Protection Plan concerning the proposed construction to remodel the exterior of the existing building and to modify portions of the landscape.

The plan referred to for this evaluation is the Site Plan, prepared by Pendley and Associates, Valley Springs, California, Sheet A1, dated 6-09-05.

Summary
There are 26 trees on this site and 8 trees located on the neighboring property toward the west included in this tree survey (34 trees total).

All of the trees are identified in this report and given a condition rating. Some trees and/or circumstances concerning them are briefly described.

The "protected trees", as defined by the City of Sunnyvale, at this project are Trees # 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 24, 25, 26, 27, 28, 29, 30, 31, 32, and 33.

Calculation of value of all 34 trees is made in accordance with the International Society of Arboriculture (ISA), Guide for Plant Appraisal, 9th Edition. The total appraised value of the 34 trees is $ 172,850.

The Lombardy popular Trees # 22, 24 and 25 are in poor condition and are recommended for removal regardless of construction.

Procedures are recommended here in order to preserve the protected trees in their present condition. Depending on the final design of the proposed sidewalk and depending on the excavation that would be required to construct this sidewalk near individual trees, several trees may be at risk of significant if not severe root losses. Procedures are recommended to mitigate the root damage.

Observations
I inspected the trees on this property on August 4, 2005. There are 26 trees on this property and 8 trees located on the neighboring property toward the west that may be exposed to some level of risk by the proposed construction. I affixed numbered aluminum labels to all of the trees on this property for field reference, but labels were not affixed to the neighboring trees.

Some of the 34 trees were not shown on the map provided and have been added. Their locations are approximate. The attached map shows the estimated locations of all of these 34 trees and their approximate canopy dimensions.

The 34 trees are classified as follows:

Trees # 1, 5, 19 – Monterey pine (*Pinus radiata*)
Trees # 2, 8, 9, 10, 11 – Shamel ash (*Fraxinus oxycarpa* 'Raywood')
Trees # 3, 4 – Carob (*Ceratonia siliqua*)
Trees # 6, 7 – American Sweet gum (*Liquidambar styraciflua*)
Trees # 12, 13, 14, 15, 16, 33 – Coast redwood (*Sequoia sempervirens*)
Tree # 17 – Chilean maytens (*Maytenus boaria*)
Trees # 18, 34 – Purple plum (*Prunus cerasifera*)
Trees # 20, 21, 23 – Holly oak (*Quercus ilex*)
Trees # 22, 24, 25 – Lombardy popular (*Populus nigra* 'Italica')
Trees # 26, 27, 30 – Canary Island pine (*Pinus canariensis*)
Trees # 28, 29, 31, 32 – Red Ironbark (*Eucalyptus sideroxylon*)

The particulars of these trees (species, trunk diameter, height, spread, and structure) are included in the attachments that follow this text.

The health and structure of each specimen is rated on a scale of 1-5 (Excellent - Extremely poor) on the data sheets attached to this text. Based on these health and structure ratings combined, I have given each tree an overall condition rating as follows:

Excellent	Good	Fair	Poor	Extremely Poor	Dead
Specimens	Specimens	Specimens	Specimens	Specimens	Specimens
1, 3, 4, 5,	6, 7, 8, 9,	2, 17, 28,	22	23, 24	25
12, 13, 14,	10, 11, 19,	29, 31,			
15, 16, 18,	21, 30	32			
20, 26, 27,					
33, 34					

Comments about Specific Trees

The majority of the species of trees at this site require irrigation. Even the Holly oak (*Quercus ilex*) specimens (# 21 and 23) are drought stressed partially due to the small planter bed in which they live. The coast redwoods, the Monterey pines, the Shamel ash specimens, the American sweet gums, the Chilean maytens, and the Lombardy poplars all require at least moderate to high quantities of water regularly to perform well.

The Lombardy poplar (*Populus nigra* 'Italica') Trees # 22, 24, and 25 are in poor condition. Tree # 22 is poorly rooted. Tree # 24 is extremely sparse, barely alive. Tree # 25 has died. Also, the Holly oak Tree # 23 is extremely poor. These trees are not expected to recover, even with good care. I recommend the removal of these trees regardless of construction.

Protected Trees

The City of Sunnyvale Municipal Code, Section 19.94.030, (3), (4), defines a "protected tree" as "a tree of significant size. "Significant size means a tree thirty-eight inches or greater in circumference (12 inches in diameter) measured four feet above ground for single trunk trees. For multi-trunk trees, significant size means a tree which has at least

one trunk with a circumference thirty-eight inches or greater measured four feet above ground level, or in which the measurements of the circumferences of each of the multi-trunks, when measured four feet above ground level, added together equal an overall circumference one hundred thirteen inches (36 inches in diameter) or greater."

The protected trees at this project are Trees # 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 24, 25, 26, 27, 28, 29, 30, 31, 32, and 33.

Risks to Trees by Proposed Construction

The plan proposes to convert the existing parking area located at the south entrance to the building to a hardtop play area. If this would involve removing and resurfacing this existing parking area, Trees # 3 and 4 may be exposed to significant root loss with the removal of the paving. However, the construction of a fence or a barrier at the entrance to this area would not likely result in significant damage to these same trees.

If there would be no improvements, landscaping, landscaping irrigation, or other construction would be done on the north or west sides of the property, it appears that Trees # 19 – 33 may not be exposed to risk of damage with the exception of Trees # 20 and 21. The Holly oak trees # 20 and 21 have low branching. If the existing parking lot would be used as a staging area, Trees # 20 and 21 may be at risk of breaking limbs by vehicles.

If a new sidewalk is constructed along Weddell Drive, several trees may be at risk of severe root damage. In this event, for the preservation of the existing trees, it would be essential to construct the new sidewalk on top of the existing grade without excavation, except in those areas where the sidewalk surface would be required to match the elevation of the existing driveway or other existing surface.

The trees at this site would likely be at risk of damage by construction or construction procedures that are common to most construction sites. These procedures may include the dumping or the stockpiling of materials over root systems, may include the trenching across the root zones for utilities or for landscape irrigation, or may include construction traffic across the root system resulting in soil compaction and root die back.

If any underground utilities would be replaced or upgraded, it would be essential that the trenches must be planned prior to construction, and that the trees be located at the exact locations as shown on the proposed plans.

Recommendations

1. If a new sidewalk would be constructed, I recommend that the new sidewalk be constructed on top of the existing grade without excavation, except in those areas where the sidewalk surface would be required to match the elevation of the existing driveway or other existing surface.

2. If trenching must be done inside the driplines of existing trees, I recommend that this trenching be done by an air spade or by a water jet in combination with hand digging.

3. Roots up to two inches in diameter may be severed, but roots 2 inches in diameter or larger must not be severed.

4. If trenching or excavation must be done inside the driplines of existing trees, these trees be irrigated for a minimum of 1 year. In this event, I recommend that these trees irrigated at least throughout the entire construction period during the dry months (any month receiving less than 1inch of rainfall). Irrigate a minimum of 10 gallons for each inch of trunk diameter every two weeks. A soaker hose or a drip line is preferred for this purpose.

5. If the existing parking lot on the north side of the building would be used as a staging area, I recommend that protective fencing be provided to protect the canopies of Trees # 20 and 21. In this case, chain link fencing mounted on concrete piers would be adequate.

6. Trenches for any utilities (gas, electricity, water, phone, TV cable, etc.) must be located outside the driplines of protected trees, unless approved by a certified arborist.

7. I recommend all of the protected trees must be irrigated throughout the entire construction period during the dry months (any month receiving less than 1inch of rainfall). Irrigate a minimum of 10 gallons for each inch of trunk diameter every two weeks. A soaker hose or a drip line is preferred for this purpose.

8. Materials must not be stored, stockpiled, dumped, or buried inside the driplines of protected trees.

9. Excavated soil must not be piled or dumped, even temporarily, inside the driplines of protected trees.

10. Any pruning must be done by an arborist certified by the ISA (International Society of Arboriculture) and according to ISA, Western Chapter Standards, 1998.

11. Landscape irrigation trenches must be a minimum distance of 10 times the trunk diameter from the trunks of protected trees. If this is not feasible, a certified arborist must be consulted.

12. Landscape materials (cobbles, decorative bark, stones, fencing, etc.) must not be installed directly in contact with the bark of trees because of the risk of serious disease infection.

Value Assessment

Two methods are used for the appraisal of these 34 trees surveyed for this project: (1) the Trunk Formula Method, typically used for appraising larger trees; and (2) Replacement Cost Method, typically used for appraising small trees (4 inches in diameter or smaller). These methods are done in accordance with the International Society of Arboriculture (ISA), Guide for Plant Appraisal, 9th Edition. Also, the ISA Western Chapter Species Classification Guide is used as part of the trunk formula method.

The trunk formula worksheet, which is made available by the ISA, is used to complete the appraisal of Trees # 1, as an example of the trunk formula method. However, in the interest of economy, I have applied the trunk formula method to a spreadsheet for the calculation of the other large trees. This spreadsheet contains all of the steps required by the trunk formula method to achieve the same calculations that would be achieved by the individual worksheet form for the trunk formula method. The value of Trees # 1-33 (appraised by the Trunk Formula Method) is $171,420.

A worksheet using the Cost Replacement Method to appraise the small Tree # 34 is included in the attachments. Tree # 34 has an appraised value of $1,430.

Thus, the appraised value of all 34 trees is $172,850.

Respectfully submitted,

Michael L. Bench, Associate

Barrie D. Coate

Barrie D. Coate, Principal

MLB/sh
Enclosures:
Assumptions and Limiting Conditions
Map
Tree Chart
Tree Value Chart
Trunk Formula Method Chart
Replacement Cost Method Chart

Trunk Formula Method
9th Edition, Guide for Plant Appraisal
for Trees Less Than 30" diameter

Owner of Property (tree):	**SOUTHBAY CHRISTIAN CENTER**
Location:	**539 E. WEDDELL, SUNNYVALE (SITE II)**
Date of Appraisal:	August 4th, 2005 Date of Failure: n/a
Appraisal Prepared for:	Brian Pendley, Pendley & Associates
Appraisal Prepared by:	Michael L. Bench
Field Observations of Subject Tree	
1. Species:	PINUS RADIATA (TREE # 1)
2. Condition:	Excellent (90%
3. Trunk Diameter, Inches:	27 inches
4. Location Value %:	Site 75 % + Contribution 70% + Placement 80% = 225÷ 3 = 75 %
Regional Plant Appraisal Committee Information	
5. Species Rating:	30 %
6. Replacement Tree Size (sq. inches) TAR:	19.6 in.
7. Replacement Tree Cost:	$ 902.50
8. Installation Cost:	$ 902.50
9. Installed Tree Cost (# 7 + # 8):	$1,805.00
10. Unit Tree Species Cost (per sq. inches):	$ 27.50 per in²
Calculations Using Field and Regional Committee Information	
11. Appraised Trunk Area Trunk Diameter, Squared (#3) x 785 =	573 sq. in.
12. Appraised Tree Trunk Increase (TA_{INCR}) = TA_A 573 in. (#11) - TA_R 19.6sq. in. (#6) =	553.4 sq. in.
13. Basic Tree Cost: (TA_{INCR}) (#12) 553.4sq. in. x UTC (#10) $ 27.50 per sq. in. + Installed Tree Cost (# 9) $ 1,805	= $ 17,024.
14. Appraised Value: Basic Tree Cost (#13) $ 17,024 x Species (#5) 30% x Condition (#2) 90% x Location (#4) 75%	= $ 3,447.
15. Round to nearest $100 ($5,000+) or $10 (less than $5,000)	= $ **3,450** .

Southbay Christian Center
539 E. Weddell Drive, Sunnyvale
Job # 08-05-157 Site II

Tree #	Species	DBH	IN²	Replac. IN²	Price IN²	Replace-ment	Basic Value	Species %	Cond. %	Locat. %	Value (EA.)	Quantity	$ Extended
1	*Pinus radata*	27	573	19.6	$27.50	$1,805	$17,024	30	90	75	$3,450	1	$3,450
2	*Fraxinus uhdei*	43	1273	19.6	$27.50	$1,805	$36,274	30	75	75	$6,100	1	$6,100
3	*Ceratonia siliqua*	12	113	14.6	$37.00	$1,805	$5,446	50	100	75	$2,040	1	$2,040
4	*Ceratonia Siliqua*	12,10,6 ,6	181	14.6	$37.00	$1,805	$7,962	50	100	75	$2,990	1	$2,990
5	*Pinus radata*	20	314	19.6	$27.50	$1,805	$9,901	30	100	75	$2,230	1	$2,230
6	*Liquidambar styraciflua*	13	133	9.62	$56.50	$1,805	$8,776	50	75	75	$2,470	1	$2,470
7	*Liquidambar styraciflua*	13	133	9.62	$56.50	$1,805	$8,776	50	75	75	$2,470	1	$2,470
8	*Fraxinus uhdei*	26	531	19.6	$27.50	$1,805	$15,869	30	75	75	$2,680	1	$2,680
9	*Fraxinus uhdei*	35	928	19.6	$27.50	$1,805	$26,786	30	75	75	$4,520	1	$4,520
10	*Fraxinus uhdei*	25	491	19.6	$27.50	$1,805	$14,769	30	75	75	$2,490	1	$2,490
11	*Fraxinus uhdei*	39	1106	19.6	$27.50	$1,805	$31,681	30	75	75	$5,300	1	$5,300
12	*Sequoia sempervirens*	41	1191	19.6	$27.50	$1,805	$34,019	90	100	75	$23,000	1	$23,000
13	*Sequoia sempervirens*	34	882	19.6	$27.50	$1,805	$25,521	90	100	75	$17,200	1	$17,200
14	*Sequoia sempervirens*	23	415	19.6	$27.50	$1,805	$12,679	90	100	75	$8,600	1	$8,600
15	*Sequoia sempervirens*	34	882	19.6	$27.50	$1,805	$25,521	90	100	75	$17,200	1	$17,200
16	*Sequoia sempervirens*	22	380	19.6	$27.50	$1,805	$11,716	90	100	75	$7,900	1	$7,900
17	*Maytenus boaria*	5,5	24	5.94	$91.00	$1,805	$3,448	70	45	75	$820	1	$820

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539 E. Weddell Drive, Sunnyvale
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18	*Prunus cerasifera*	10,9,7, 6,6	158	9.62	$56.50	$1,805	$10,188	70	90	75	$4,810	1	$4,810
19	*Pinus radata*	20	314	19.6	$27.50	$1,805	$9,901	30	80	75	$1,780	1	$1,780
20	*Quercus ilex*	13	133	9.62	$56.50	$1,805	$8,776	90	100	75	$5,900	1	$5,900
21	*Quercus ilex*	16	201	9.62	$56.50	$1,805	$12,618	90	80	75	$6,800	1	$6,800
22	*Populus nigra 'Italica'*	6	28	19.6	$27.50	$1,805	$2,036	30	60	75	$280	1	$280
23	*Quercus ilex*	10,6	107	9.62	$56.50	$1,805	$7,307	90	15	75	$740	1	$740
24	*Populus nigra 'Italica'*	22,16,7	500	19.6	$27.50	$1,805	$15,016	30	5	75	$170	1	$170
25	*Populus nigra 'Italica'*	16,10,8 ,6	DEAD - COST TO REMOVE							75	($100)	1	($100)
26	*Pinus canariensis*	14	154	14.6	$37.00	$1,805	$6,963	90	90	75	$4,230	1	$4,230
27	*Pinus canariensis*	16	201	14.6	$37.00	$1,805	$8,702	90	100	75	$5,900	1	$5,900
28	*Eucalyptus sideroxylon*	20	314	9.62	$56.50	$1,805	$19,002	30	60	75	$2,570	1	$2,570
29	*Eucalyptus sideroxylon*	23	415	9.62	$56.50	$1,805	$24,709	30	60	75	$3,340	1	$3,340
30	*Pinus canariensis*	21	346	14.6	$37.00	$1,805	$14,067	90	75	75	$7,100	1	$7,100
31	*Eucalyptus sideroxylon*	31	739	9.62	$56.50	$1,805	$43,015	30	60	75	$5,800	1	$5,800
32	*Eucalyptus sideroxylon*	27	573	9.62	$56.50	$1,805	$33,636	30	60	75	$4,540	1	$4,540
33	*Sequoia sempervirens*	19	284	19.6	$27.50	$1,805	$9,075	90	100	75	$6,100	1	$6,100
												TOTAL	$171,420

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BARRIE D. COATE and ASSOCIATES
(408) 353-1052
23535 Summit Road
Los Gatos, CA 95030

		Measurements							Condition				Pruning/Cabling Needs							Pest/Disease Problems						Recommend				Status	
Tree #	Plant Name	DIAMETER @ 4-1/2 FEET	MULTI-SYSTEM	DBH	DBH	DIAMETER @ 2 FEET	HEIGHT ESTIMATED	SPREAD ESTIMATED	HEALTH (1-5)	STRUCTURE (1-5)	CONDITION RATING (2-10)	HAZARD RATING (4-12)	CROWN CLEANING	CROWN THINNING	CROWN RESTORATION	CROWN RAISING	REMOVE END-WEIGHT	CABLES NEEDED #	PRUNING PRIORITY (1-5)	INSECTS (1-5)	TREE CROWN DISEASE (1-5)	DEAD WOOD (1-5)	TRUNK DECAY(1-5)	ROOT COLLAR COVERED (1-5)	ROOT COLLAR DISEASE (1-5)	NEEDS WATER(1-5)	NEEDS FERTILIZER	**RECOMMEND REMOVAL**	**REMOVAL PRIORITY (1-3)**	HERITAGE TREE?	PROTECTED TREE?
1	Monterey Pine	27					50	50	1	2																				
	Pinus radiata																													
2	Shamel Ash	43					70	50	1	4																				
	Fraxinus uhdei																													
3	Carob	12					20	25	1	1																				
	Ceratonia siliqua																													
4	Carob	12	√	10	6/6		25	35	1	1																				
5	Monterey Pine	20					50	45	1	1																				
6	American Sweet Gum	13					50	30	1	3																				
	Liquidambar styraciflua																													
7	American Sweet Gum	13					55	35	1	3																				
8	Shamel Ash	26					70	45	1	3																				
9	Shamel Ash	35					80	50	1	3																				
10	Shamel Ash	25					80	50	1	3																				

Job Name: South Bay Christian Center, 539 E. Weddell, Sunnyvale
Job #: 08-05-157
Date: August 4th, 2005

1 = Best, 5 =

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BARRIE D. COATE and ASSOCIATES
(408) 353-1052
23535 Summit Road
Los Gatos, CA 95030

Tree #	Plant Name	Measurements							Condition				Pruning/Cabling Needs							Pest/Disease Problems						Recommend				Status	
		DIAMETER @ 4-1/2 FEET	MULTI-SYSTEM	DBH	DBH	DIAMETER @ 2 FEET	HEIGHT ESTIMATED	SPREAD ESTIMATED	HEALTH (1-5)	STRUCTURE (1-5)	CONDITION RATING (2-10)	HAZARD RATING (4-12)	CROWN CLEANING	CROWN THINNING	CROWN RESTORATION	CROWN RAISING	REMOVE END-WEIGHT	CABLES NEEDED #	PRUNING PRIORITY (1-5)	INSECTS (1-5)	TREE CROWN DISEASE (1-5)	DEAD WOOD (1-5)	TRUNK DECAY(1-5)	ROOT COLLAR COVERED (1-5)	ROOT COLLAR DISEASE (1-5)	NEEDS WATER(1-5)	NEEDS FERTILIZER	**RECOMMEND REMOVAL**	**REMOVAL PRIORITY (1-3)**	HERITAGE TREE?	PROTECTED TREE?
11	Shamel Ash	39					90	50	1	3																				
12	Coast Redwood	41					80	35	1	1																				
	Sequoia sempervirens																													
13	Coast Redwood	34					80	35	1	1																				
14	Coast Redwood	23					75	30	1	1																				
15	Coast Redwood	34					90	35	1	1																				
16	Coast Redwood	22					80	25	1	1																				
17	Chilean Maytens	5	√	5			10	10	3	3																				
	Maytenus borria																													
18	Purple Plum	10	√	9	7		25	30	1	2																				
				6	6																									
19	Monterey Pine	20					70	35	2	1																				
20	Holly Oak	13					15	30	1	1																				
	Quercus ilex																													

Job Name: South Bay Christian Center, 539 E. Weddell, Sunnyvale
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1 = Best, 5 = V

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BARRIE D. COATE and ASSOCIATES
(408) 353-1052
23333 Summit Road
Los Gatos, CA 95030

Tree #	Plant Name	Measurements							Condition				Pruning/Cabling Needs							Pest/Disease Problems						Recommend		Status	
		DIAMETER @ 4-1/2 FEET	MULTI-SYSTEM	DBH	DBH	DIAMETER @ 2 FEET	HEIGHT ESTIMATED	SPREAD ESTIMATED	HEALTH (1-5)	STRUCTURE (1-5)	CONDITION RATING (2-10)	HAZARD RATING (4-12)	CROWN CLEANING	CROWN THINNING	CROWN RESTORATION	CROWN RAISING	REMOVE END-WEIGHT	CABLES NEEDED #	PRUNING PRIORITY (1-5)	INSECTS (1-5)	TREE CROWN DISEASE (1-5)	DEAD WOOD (1-5)	TRUNK DECAY(1-5)	ROOT COLLAR COVERED (1-5)	ROOT COLLAR DISEASE (1-5)	NEEDS WATER(1-5)	NEEDS FERTILIZER	**RECOMMEND REMOVAL**	**REMOVAL PRIORITY (1-3)**	HERITAGE TREE?	PROTECTED TREE?
21	Holly Oak	16					30	35	2	1																				
22	Lombardy Poplar	6					30	10	1	4																		√	3	
	Populus nigra 'Italica'																													
23	Holly Oak	10	√	6			25	25	5	3																				
24	Lombardy Poplar	22	√	16	7		75	15	5	4																				
25	Lombardy Poplar	16	√	10	8/6		dead																					√	5	
26	Canary Island Pine	14					40	20	1	1																				
	Pinus canariensis																													
27	Canary Island Pine	16					50	20	1	1																				
28	Red Ironbark	20					45	45	1	4																				
	Eucalyptus sideroxylon																													
29	Red Ironbark	23					50	45	1	4																				
30	Canary Island Pine	21					65	30	1	3																				

Job Name: South Bay Christian Center, 539 E. Weddell, Sunnyvale
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BARRIE D. COATE and ASSOCIATES
(408) 353-1052
23535 Summit Road
Los Gatos, CA 95030

		Measurements							Condition				Pruning/Cabling Needs							Pest/Disease Problems						Recommend			Status	
ee #	Plant Name	DIAMETER @ 4-1/2 FEET	MULTI-SYSTEM	DBH	DBH	DIAMETER @ 2 FEET	HEIGHT ESTIMATED	SPREAD ESTIMATED	HEALTH (1-5)	STRUCTURE (1-5)	CONDITION RATING (2-10)	HAZARD RATING (4-12)	CROWN CLEANING	CROWN THINNING	CROWN RESTORATION	CROWN RAISING	REMOVE END-WEIGHT	CABLES NEEDED #	PRUNING PRIORITY (1-5)	INSECTS (1-5)	TREE CROWN DISEASE (1-5)	DEAD WOOD (1-5)	TRUNK DECAY(1-5)	ROOT COLLAR COVERED (1-5)	ROOT COLLAR DISEASE (1-5)	NEEDS WATER(1-5)	NEEDS FERTILIZER	**RECOMMEND REMOVAL**	**REMOVAL PRIORITY (1-3)**	HERITAGE TREE?	PROTECTED TREE?
31	Red Ironbark	31					45	35	1	4																				
32	Red Ironbark	27					45	50	1	4																				
33	Coast Redwood	19					60	25	1	1																				
34	Purple Plum	4					15	20	1	1																				

Job Name: South Bay Christian Center, 539 E. Weddell, Sunnyvale
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1 = Best, 5 =

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Replacement Cost Method

Appraised Value = (Installed Plant Cost x Species % x Condition % x Location %)
+ Removal and Cleanup Cost (if needed)
Installed Plant Cost = Replacement Plant Cost + Installation Cost

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Property: **539 E. Weddell Drive, Sunnyvale** Date: **August 4th, 2005**
Appraiser: **Michael L. Bench**

Field Observations:

1. Species: *Prunus cerasifera* – Tree # 34
2. Condition 100 %
3. Trunk Circumference in/cm and/or Diameter 4.0 in/cm of Shrub or Vine Size (height/spread/volume)
4. Location % = (Site 75 % + contribution 70% + Placement 80%) ÷ 3 = 75%
5. Removal and Cleanup Costs for appraised plant or plant that will be replaced. = $ 0

Regional Plant Appraisal Committee and/or Appraiser Developed or Modified Information

6. Species rating 90%
7. Replacement Plant Size (diameter) 4.0 in/cm
8. Replacement Cost = $850
9. Installation Cost = $1,275
10. Other Regional Information: 48" boxed Valley Crest Tree Company

Calculations by Appraiser Using Field and/or Regional Information

11. Installed Plant Cost = Plant Cost (#8) $ 850 + Installation Cost (#9) $ 1,275 = $2,125
12. Adjusted Installed Plant Cost = Installed Plant Cost (#11) $ 2,125 x Species rating (#6) 90% x Condition (#2) 100% x Location (#4) 75% = $1,434
13. Add Removal and Cleanup Costs (#5) (if appraised plant is replaced) $0 = $ 0
14. The Appraised Value is either #12 or #13 = $ 1,434
15. If the Appraised Value (#14) is $5,000 or more, round it to the nearest $100, if it is less, round it nearest $10.
16. Appraised Value (#14) = **$1,430**

*A median cost is the most appropriate cost to use because there are an equal number of costs greater than and less than the median. Equally important, plants and installation are available at those specific costs.

ATTACHMENT E
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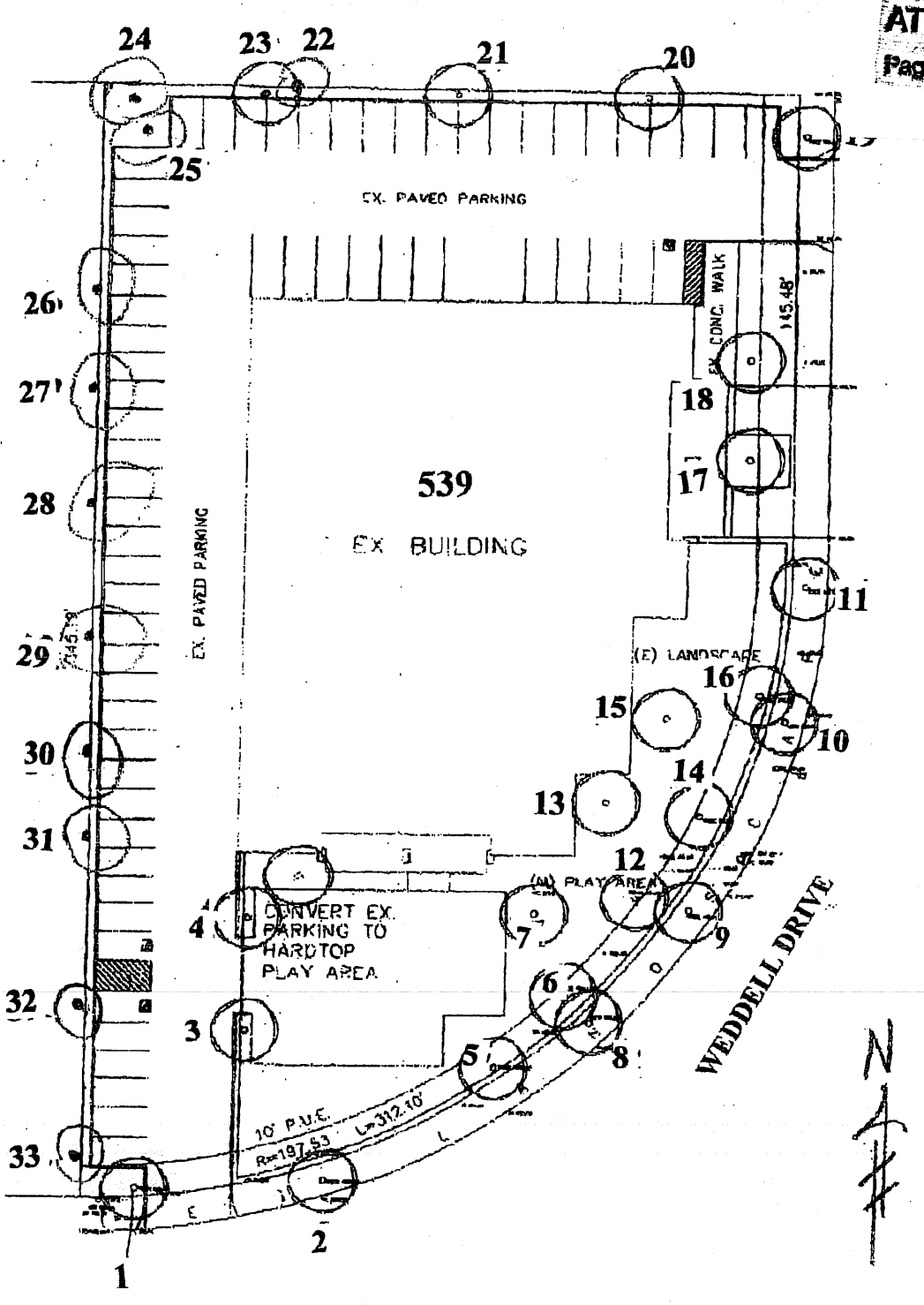

HORTICULTURAL CONSULTANTS CONSULTING ARBORISTS **BARRIE D. COATE and ASSOCIATES** (408) 353-1052 23535 Summit Road Los Gatos, CA 95030	Evaluation of trees at the Southbay Christian Center 539 E. Weddell Drive, Sunnyvale Requested by: Brian Pendley, Pendley & Associates Prepared by: Michael L. Bench, Consulting Arborist
Tree numbers correspond to evaluation charts. All dimensions and tree locations are approximate.	Date: August 4th, 2005 — Job # 08-05-157 Site II This logo is attached to a plan done by another professional. The presence of this logo is not for the purpose of claiming credit for the plan but merely to add horticultural or arboricultural information to a